

From owner-qrp-l@netcom.com Mon Oct 17 00:12:40 1994
From: "Warren E. Lewis" <saswel@unx.sas.com>
Message-Id: <199410170121.AA02697@cardamom.unx.sas.com>
Subject: FALL ARCI CW QSO PARTY
Date: Sun, 16 Oct 1994 21:21:15 -0400 (EDT)

What fun!! What fun!!

I got home late Saturday night from Florida and jumped in the fray for about an hour!! About all I could stand after a day in airports. I lounged around this morning and didn't get started until about 1600Z (Noon EST). I called it quits about 2330Z (7:30PM EST). I worked off and on about 5-6 hours. After all was said and done I had quadrupled my score from last year. I wound up with 26,040 points compared with my 6,237 from last year. One of my biggest thrills was actually working my first QRP DX...both HP1AC and V01DRB. It may be old hat to some, but, to us budding QRP folks it is a thrill!! Other list notables that I worked were KH6CP/1 and K7YHA. The biggest signal award will have to go to W8MVN, Ernie from Ohio, again. I almost got my ears blown out when I went by him the first time on 40 meters.

I'm sure everybody will agree propagation was grand compared to last year!!

Well...if anyone is interested here is my report:

Rigs: NORCAL 40 and TS450 turned way down.
Ant: 80M Dipole up 15 feet (yep 15 feet) and MFJ Tuner

Band	Points	S P C
----	-----	-----
160	-	-
80	7	2
40	101	14
20	42	7
15	5	1
10	-	-
Tot	155	24

Score = 155 x 24 x 7 = 26040

- Warren

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Warren E. Lewis

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From owner-qrp-1@netcom.com Sun Oct 16 23:37:18 1994
Date: Sun, 16 Oct 94 18:01:22 -0500
From: adams@chuck.dallas.sgi.com (chuck adams)
Message-Id: <9410162301.AA05062@chuck.dallas.sgi.com>
Subject: Gates Energy

Gang,

I just worked the QSO party on 40M this morning
and a little this afternoon off my 23 pound batteries.

These are Gates Energy Products "Cyclon" batteries.
Each cell is 2.0V and is 6" inches high and about
2.25" in diameter. I had asked about them before.
I took the PVC cover off the pack, they are 2X3 with
PVC base and cover and I couldn't see any other info.
I bought the whole pack at a swapfest in OKC OK for
about \$21 two years ago. Well, they are 25.0Ahr!!!
And I was worried how long the Sierra was gonna run?
:-)

I've been charging them at 150mA with a R/C nicad
battery charger that I've had for years and years.
No chance of too rapidly charging these puppies.
I can tell you I was very very careful with the
wrench and screwdriver taking the large copper
bars off between the cells to look at them. I
wasn't interested in arc-welding craftsman tools. :-)

Not exactly portable, but that's the idea. If you
see a set of these around at that price, you won't be
sorry that you picked them up.

dit dit
SIG
Chuck Adams K5FO CP-60
adams@sgi.com

From owner-qrp-1@netcom.com Sun Oct 16 18:57:12 1994
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: Joy of QRP?

Date: Sun, 16 Oct 94 14:27:03 EST5EDT

Message-Id: <1994Oct16.142703.18863@wb3ffv.ampr.org>

WA4ZID asked about the Joy of QRP. A couple months ago Ade Weiss posted a note here saying he had no objection to people copying it for friends, so if anyone wants to do that for WA4ZID they can do so with a clean conscience. Please, no need to reply to this since I know the interest is there and I'm not taking names or anything, but I just might consider doing a photocopy reprint of Joy of QRP (if W0RSP approves, of course) if the Milliwatt reprints turn out OK. The price shouldn't be too high since there are fewer pages than the Milliwatt. The book falls into the same category as the Milliwatt--"important and interesting part of QRP history which must be preserved for future generations"! 73 and Queue Our Pea DE WA8MCQ

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Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
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From owner-qrp-l@netcom.com Mon Oct 17 01:38:45 1994

From: NYOUNG@nova.wright.edu

Date: Sun, 16 Oct 1994 20:10:14 -0400 (EDT)

Subject: light sensitive VFOs &c

Message-Id: <01HICUGGRSIW8ZFCE9@nova.wright.edu>

I just read the note about a vfo that shifts when you put shade over the board. It's the diode between the gate and ground what's doing it.

I think I read about this in a Bill Orr column many years ago. My marvelous pornographic memory keeps me from being more precise. Anyway, it turns out that the 1N914 between the gate of the FET and ground will pull the frequency with light.

That's why I never test for drift or pull or shift until the circuit board's wrapped up in a box tight as a submarine running qualification trials.

But then, think of using an LED over the diode for FSK. Ah, the wonders of modern technology.

That's why, even though the sign in the Wendy's down the road has a list for Kids Salad Bar, they won't sell my six year old one because there's no button on the computerized cash register for Kids Salad Bar.

Is working for Dave great or what?

73

Nils

WB8IJN

From owner-qrp-1@netcom.com Sun Oct 16 18:27:43 1994
From: Bruce Robertson <brucero@epas.utoronto.ca>
Message-Id: <9410162006.AA09698@blues.epas.utoronto.ca>
Subject: Light sensitive wfo???
Date: Sun, 16 Oct 1994 16:06:31 -0400 (EDT)

I've built a fet-style vfo for 3.5 MHz with varicap tuning and two buffer stages. It's from RF Design for the Radio Amateur. Anyway, I found the strangest thing: it shifts in freq. not only with temp, but also with its illumination. With the lights off, or with a hand shading it, it moves a lot! Does anyone know what component might be doing this?

Yours, VE3UWL
Bruce G. Robertson

From owner-qrp-1@netcom.com Sun Oct 16 22:29:27 1994
Message-Id: <199410162228.SAA27214@thor.INS.CWRU.Edu>
From: Stephen Trier <sct@po.cwru.edu>
Date: 16 Oct 1994 22:28:11 GMT
Subject: Re: Light sensitive wfo???

Bruce Robertson VE3UWL writes:

> Anyway, I found the strangest thing: it shifts in freq. not only with
> temp, but also with its illumination.

I remember reading about that on rec.radio.amateur.homebrew a few months ago. Some of the encapsulating compounds used for transistors and diodes aren't opaque at all wavelengths of light, so IR or UV could be getting in there, or even a touch of visible light. Lots of semiconductor junctions are light-sensitive.

I guess it's one more reason to seal a VFO in a box.

Stephen

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Stephen Trier "Here, but for an extraordinary physics teacher,
sct@po.cwru.edu goes a saxophone player."
KG8IH - Albert Overhauser, National Science Medal winner

From owner-qrp-1@netcom.com Sun Oct 16 08:45:21 1994
Date: Wed, 12 Oct 1994 11:39:39 +0200 (EET)

From: "Arjen Raateland, VYH/vet, puh. 90-4028 350" <Arjen.Raateland@vyh.fi>
Subject: noise bridge - OHR QRP Spirit
Message-Id: <01HI6RKV46HE99DSYF@vyh22.vyh.fi>

Hi,

I have acquired a noise bridge (made by S.E.M. on the Isle of Man) for adjusting my antenna tuner. It is a fixed impedance bridge for 50 Ohms with protection against accidental application of TX power while the bridge is on. The circuit is very simple and I would say the construction of the bridge part is not very sophisticated, having a simple ferrite bead and quite long connecting wires and no shielding between noise generator and bridge. The noise generator has 4 LF transistors.

I bought it mainly because I didn't want to bother building one myself. I built a noise bridge some 10 yrs. ago after an article in Ham Radio. The design required accurate compensation for stray inductance. It was a nice project and it worked quite well, but I didn't have a lot of use for it, because I was and still am a Technical Class operator. Anyway I gave it away one day, so now that I am studying for my CW-exam I had to get another one.

When I first tried the SEM noise bridge I couldn't get a decent null at all. After a while I found that with a 20 dB attenuator the null was quite OK, except perhaps for the 80 m band. The instructions did say that in some cases the RF gain needs to be turned down.

The problem, of course, is that nulling the bridge cancels the wide band noise cancelled for only a short range of frequencies and the noise output is too high for the wide band input circuit. The noise heard in the null is of a different 'color' as the noise outside the null.

The receiver I use is a Lowe HF-225 Europa, which is supposed to be quite good. Having only a wire half on the balcony and half inside as antenna, I haven't been able to get the rx to produce intermodulation from on the air signals.

Would anybody care to comment on this? Do noise bridges in general give too much output on the low bands? Would exchanging the LF transistors for HF transistors make the noise output more even across the HF bands?

In a few weeks I'll be constructing a OHR QRP Spirit for 80 m. I find the alignment instructions a bit awkward, i.e. I would do it differently. Like putting the TX 9 MHz oscillator in the center of the filter bandpass first. The instructions also say that the LO should be

on the lower side slope of the filter. Other sources would have the L0 on the high side, because that is the steeper side for the kind of filter used. Any comments?

I've joined this list just a week or so ago and I find it quite interesting.

OH2ZAZ, ex-PAoSCS,
Arjen Raateland

From owner-qrp-l@netcom.com Sun Oct 16 02:57:02 1994
From: Bilbee@aol.com
Date: Fri, 14 Oct 1994 06:19:39 -0400
Message-Id: <9410131211463052632@aol.com>
Subject: Notes: Sierra testing on bicycle tour

There was some interest on the stuff I used when I field-tested the Sierra prototype on the bicycle tour the end of August. So here goes:

I used a Solarex solar panel (available from Antennas West, Real Trading Co. and Sunlight Energy Systems) MSX-10. The "10" means it can generate 10 watts under full sunlight. I bought mine from the latter company, run by Mike Bryce (the QRP columnist for 73 mag, out of Massillion, OH) for about \$150. I also used his charge controller between the panel (which is about the size of a long clipboard) and my 3.5 AH lead acid battery.

I position the solar cell on top my sleeping bag/tent roll on the back of the bike. The blue crystals on these solar panels are right out of Star Trek -- very beautiful!

My prime antenna was a fanned inverted V for 20 and 40 meters, with a clip add-on to change the 20-meter arm to 30 meters. The design was from a recent "backpacker's antenna" article from QST. I was disappointed with the antenna for my purposes, tho. It uses thin enamelled copper wire. I had trouble with the wires getting entangled, and the dern thing took too long to set up and take down and store. When you're moving from campsite to campsite daily, it just takes too much time to handle. A simple vertical is a much better idea.

My other antenna was an end-fed 20 meter dipole, using RG174. It is a much simpler, more practical design, tho the trouble with it was that I didn't have enough feed line. This design is from a QRP book by Dave Ingram.

I ended up taking the 20 meter legs off the fanned inverted V and just making it a simple 40 meter inverted V. Most of the action was on 40 m anyway

I also had a homebrew antenna tuner with me -- using toroids and air variables -- a design from Doug? DeMaw (sp?) in one of the ARRL books. Also a homebrew SWR meter. A design from one of the QRPp newsletters put out by

NorCal QRP club.

We were touring the Pacific Crest Bicycle Trail, which is a road-based route I originated from Canada to Mexico through the Cascades, Sierra Nevada and other mountainous areas. It attempts to come as close as possible to the Pacific Crest Hiking Trail. I did the guidebook ("The Pacific Crest Bicycle Trail" pub. by Bittersweet Publishing Co of Livermore, CA). Each summer now I organize a week-long tour along the Trail, especially looking for hams to be part of it. If you're interested, please E-mail me your Postal Service mail and Internet address, and I'll put you on the mailing list for next year. I should say, tho, that I plan to keep each year's group at 10 and we had 10 this year. If it expands beyond 10, I'll probably form two groups riding at different dates. Next year's trip will be from Hamburg, CA (on the Klamath River) to Lake Tahoe, CA.

Whew. I can see my America Online bill for next month

-- Bil Paul KD6JUI San Mateo, CA

From owner-qrp-l@netcom.com Sun Oct 16 19:27:53 1994
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: Re PCB-material boxes
Date: Sun, 16 Oct 94 14:44:29 EST5EDT
Message-Id: <19940ct16.144429.19189@wb3ffv.ampr.org>

Not sure if I like this method. A few years ago I bought a W7EL rig from a friend, who built it from a kit from the now-defunct Small Parts Center in Michigan. It used pieces of PCB stock soldered together to make the box. However, he did not use any sort of protective spray over it, so the bare copper of the box was rather nasty and tarnished. Also, my friend did use copper tape on the joints and soldered it on, on the outside; I never did like the look of a tarnished copper box with big, ugly solder seams on all sides. I keep promising myself that I'll rip out the guts some day and put them in a new box. If I use PCB stock for the new box, I'll only solder it on the insides, and will carefully clean and buff the copper first and put some sort of Krylon clear spray on it. (Or, even better, I'll avoid the use of PCB stock in the first place.) 73 and Queue Our Pea DE WA8MCQ

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Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
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From owner-qrp-l@netcom.com Sun Oct 16 22:30:51 1994
Date: Sun, 16 Oct 94 17:52:55 -0500

From: adams@chuck.dallas.sgi.com (chuck adams)
Message-Id: <9410162252.AA05056@chuck.dallas.sgi.com>
Subject: Photo Diode

Someone asked the question about light sensitive components in a vfo and I apologize, as I cleared the screen before taking notes.

Is there a possibility that one or more diodes you are using are enclosed in transparent glass? Place a piece of black electrical tape over them and see if that cures the problem. Sounds like a photoelectric effect for solid state diodes. Their capacitance and resistance will change with light intensity. Isn't experimenting fun? There are so many factors involved.

dit
dit
SIG
Chuck Adams K5FO CP-60
adams@sgi.com

From owner-qrp-1@netcom.com Sun Oct 16 03:40:48 1994
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: QRP Quarterly is out
Date: Sat, 15 Oct 94 23:20:42 EST5EDT
Message-Id: <19940ct15.232042.1227@wb3ffv.ampr.org>

In reply to the recent query by Larry East, yes, the October issue is on the streets and being received by people. (And for Larry, I just got the inputs for the Idea Exchange that you sent. Thanks.) 73 and Queue Our Pea DE WA8MCQ

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From owner-qrp-1@netcom.com Sun Oct 16 10:34:31 1994
Date: Sun, 16 Oct 1994 06:56:40 -0500 (CDT)
From: Bob Howle <bhowle@freud.inst.com>
Subject: Re: Smallest Superhet ?
Message-Id: <Pine.SOL.3.90.941016065240.16156A-100000@freud.inst.com>

On Sat, 15 Oct 1994, Alan Kaul wrote:

> Hi Bob .. check out the NN1G series of xcvs named:
> 160-40, 80-40, 40-40, 30-40 and 20-40 which sell for
> forty-bucks (but with shipping and handling cost \$45)
> with superhet, xtal filter, 1.5W out and VFO -- all
> on a board which measures 2.8 inches x 4.0 inches!

<snip>

>
> A SASE to NN1G, Dave Benson
> 80 E. Robbins Av
> Newington, CT 06111

Alan -

Thanks for the info - for some reason I had assumed that the NE40
rigs were larger, but from your discription it sounds like this
radio will be perfect for my needs. I'll get a letter off to Dave
first thing monday.

much TNX / Bob / WA4ZID

From owner-qrp-l@netcom.com Sun Oct 16 19:55:27 1994
Date: Sun, 16 Oct 1994 15:36:13 -0700 (PDT)
From: Alan Kaul <kaul@netcom.com>
Subject: Re: VXO XCVRS--add 1
Message-Id: <Pine.3.89.9410161553.A23886-01000000@netcom20>

Oooops .. I forgot. I do have a VXO superhet. It was designed by a
couple of ARRL guys in about '83-'84 and was written up in QST. Seems to
me Doug DeMaw might have been involved. Anyway, it was called 'Barbados'
because he designed it for a trip to the islands he was planning.
Circuit Board Specialists, PO Box 969, Pueblo, Colo., 81002 made my
board. They (if still in business) or someone might have had a kit on
it back then. If you can find it in the old issue of QST, there's might
be a circuit board and/or parts kit listed in the article footnotes.
Perhaps one of our readers will remember it and have the reference handy!

I asssembled the parts and built one, and it worked using 3.579 Xtals for
filter and BFO and approx 17mHz Xtals for the VXO (17-3.579=20M band
coverage).

There was one shortcoming with the receiver as I remember it -- the
choice of 8-pin chip for the audio output was an op-amp---TL081 or TL082
if I remember correctly. It didn't have enough gain. But I took the rig

to 6Y5 on a vacation and running about half-a-watt on 20M to a 2n2222, I workd 15-20 QSO's including W and DL! Then I built the ''Handbook rig'' (a variation of it is still in the most recent handbook I've seen) 6W - with a pair of MRF-472's in the final and took that rcvr and xmtr with me to the Middle East when I was transferred in 1985 and in about 2-mos of operating on 20 CW from the 6th floor of a hotel (Amman Intercontinental) using wire antenna off the balcony, I worked about 80-countries as JY9RL. The call letters, of course, were worth 10dB!!!

I won't say that VXO superhets don't exist, but they are few and far between.

I still have the rcvr and xmtr. But I tried them the other night on the bench and both are DEAD! One of these days I'll get 'em back up and running and probably will have to build a little LM386 audio amp so I can hear!

Good luck, whatever you decide! 72/73 de alan

[<Alan Kaul, W6RCL>] kaul@netcom.com